Remarks

The office action of December 16, 2002, has been carefully reviewed. This paper is responsive thereto.

The title has been amended per the Examiner's request.

The specification has been amended to clarify the language used to address the present invention.

Claims 17-24 have been amended to comport with the specification. New claims 25-27 have been added.

No new matter has been entered.

The Examiner objects to the incorporation by reference of pending applications in the present application. Applicants respectfully submitted that, in accordance with in MPEP § 608.01 (p), Applicants have properly incorporated by reference the pending applications. Applicants respectfully request the examiner to clarify which incorporation by reference is improper.

Claims 19-20 are rejected under 35 USC § 112. Applicants have amended claims 19 and 20 to be dependent on claims 17 to address this rejection. ✓

Claims 1-24 stand rejected under 35 USC § 102 (e) as being anticipated by U.S. Patent Number 626-2719 to Bi et al. Applicants respectfully traverse.

Claims 1, inter alia, recites:

" Displaying a user interface having a plurality of soft buttons in response to the predetermined input, the plurality of soft buttons providing selectable functionality of a two-button mouse-type computer input device."

Bi et al. shows a display area 1200 and a hot icon area 1202. See col. 40 lines 39 through 43. The icon referenced by the examiner, icon 1232 showing the conversion between a right mouse button function and a left mouse button function, is only disclosed to be in hot icon area 1202. This icon is always present. See Figure 36 of Bi et al. There is no indication that icon 1232 is displayed in response to the predetermined input. Accordingly, as Bi et al. fails to disclose the icon 1232 being displayed in response to a predetermined user input as claimed, Bi et al. cannot anticipate claim 1.

As claims 9 and 17 include similar recitations, these claims are allowable over Bi et al. as well.

Claims 20-23 stand rejected under 35 USC § 103 (a) as being unpatentable over Bi et al. Applicants respectfully traverse.

Applicants submit that the independent claims 17 from which claims 20-23 dependent is allowable over Bi et al. As the examiner has not addressed to be elements missing from Bi et al., Applicants submit that the dependent claims 20-23 (as well as claims 4-7 and 12-15) are allowable for the same reasons.

If the examiner has any questions, the examiner is invited to contact the undersigned to further prosecution.

Respectfully submitted,

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Marked Up Version of Amendment Showing Changes Made

In the Abstract:

The abstract has been replaced with the following:

-- A system and method for emulating the functional behavior of a two-button mouse-type computer input device is ~~disclosed~~described. A predetermined input generated by digitizing pen and a digitizing writing surface is received, and a user interface having a plurality of soft buttons is displayed. The plurality of soft buttons provides selectable functionality of a two-button mouse-type computer input device. Preferably, the plurality of soft buttons includes a right-button function, a shift function, a control function, an alternate function and a bull's-eye function. --.

In the Specification:

The paragraph spanning page 1, line 3, through page 2, line 16, has been replaced with the following paragraph.

-- The present application claims priority to U.S. Provisional Patent Application Serial No. 60/247,843, entitled Mouse Input Panel And User Interface, filed on November 10, 2000, which is hereby incorporated by reference as to its entirety. The present application is related to U.S. Provisional Patent Application Serial No. 60/247,182, entitled Method and Apparatus For Improving the Appearance of Digitally Represented Handwriting, filed on November 10, 2000;

to U.S. Provisional Patent Application Serial No. 60/247,841, entitled Highlevel Active Pen Matrix, and filed on November 10, 2000; to U.S. Provisional Patent Application Serial No. 60/247,973, entitled Selection Handles in Editing Electronic Documents, and filed on November 10, 2000; to U.S. Provisional Patent Application Serial No. 60/247,842, entitled Insertion Point Bungee Space Tool, and filed on November 10, 2000; to U.S. Patent Application Serial No. 09/768,171~~(Atty docket No. 3797.00083)~~, entitled Selection Handles In Editing Documents, and filed January 24, 2001; to U.S. Provisional Patent Application Serial No. 60/247,844, entitled Simulating Gestures of a Mouse Using a Stylus and Providing Feedback Thereto, and filed on November 10, 2000; to U.S. Provisional Patent Application Serial No. 60/247,400, entitled System and Method For Accepting Disparate Types Of User Input, and filed on November 10, 2000; to U.S. Provisional Patent Application Serial No. 60/247,972, entitled In Air Gestures, and filed on November 10, 2000; to U.S. Patent Application Serial No. 09/759,202~~(Atty Docket No. 3797.00090)~~, entitled In-Air Gestures For Electromagnetic Coordinate Digitizers, and filed January 15, 2001; to U.S. Provisional Patent Application Serial No. 60/247,831, entitled Mouse Input Panel Windows Class List, and filed on November 10, 2000; to U.S. Patent Application Serial No. 09/801,880~~(Atty Docket No. 3797.00091)~~, entitled Mouse Input Panel Windows Class List, and filed March 9, 2001; to U.S. Provisional Patent Application Serial No. 60/247,843, entitled Mouse Input Panel and User Interface, and filed on November 10, 2000; to U.S. Provisional Patent Application Serial No. 60/247,479, entitled System and Method For Inserting Implicit Page Breaks, and filed on November 10, 2000; to U.S. Patent Application Serial No.

09/736,170~~(Atty docket No. 3797.00086)~~, entitled High Level Active Pen Matrix, and filed on December 15, 2000; to U.S. Patent Application Serial No. 09/741,107, entitled Mode Hinting/Switching, and filed on December 21, 2000; to U.S. Provisional Patent Application Serial No. 60/247,847, entitled Tablet Computer and its Features, and filed on November 10, 2000; and to U.S. Patent Application Serial No. 09/750,288, entitled Anchoring, Rendering, Reflow & Transformations, filed December 29, 2000, each of which is incorporated by reference herein as to their entireties. --.

The paragraph at page 5, lines 1-7, has been replaced with the following:

Computers that are configured without traditional keyboard and mouse input devices and that have relatively large displays are sometimes referred to as tablet PCs. More generically, tablet ~~Tablet~~ PCs belong to the group of stylus-based computing systems. These computing systems are typically configured so that a digitizer is combined with or overlaid upon the display ~~of the tablet PC~~. The digitizer senses the coordinates of a pen tip as the pen is moved in contact with the display surface. When electromagnetic displays and pens are used, the ~~tablet PC~~stylus-based computing system can sense proximity of the pen to the display in addition to sensing just contact between the pen and the display.

The paragraph at page 6, lines 3-17, has been replaced with the following:

-- The present invention also provides a tablet PC having a digitizing writing surface that

generates a predetermined output in response to, for example, a predetermined in-air gesture made with a digitizing pen, and a display that displays a user interface having a plurality of soft buttons in response to the predetermined output. The plurality of soft buttons provides selectable functionality of a two-button mouse-type computer input device. Preferably, the plurality of soft buttons includes a right-button function, a shift function, a control function, an alternate function and a bull's-eye function. The digitizing writing surface receives a user selection of at least one of the plurality of soft buttons, and the user interface is hidden from view on the display when the user selection of a selected soft button is received. When the digitizing display receives a user selection for the bull's-eye function; the ~~tablet P~~stylus-based computing system sends a right-button event to an application displayed below the user interface on the display in response to the user selection for the bull's-eye function. An inactivity timer is started when the user interface is displayed on the display, and the user interface is hidden from view on the display when a predetermined amount of time elapses without receiving a user selection of at least one of the plurality of soft buttons.

The paragraphs on page 7, lines 2-6, have been replaced with the following:

-- Aspects of the ~~The~~ present invention ~~is~~ are illustrated by way of example and not limitation in the accompanying figures in which like reference numerals indicate similar elements and in which:

Figure 1 shows a schematic diagram of a ~~conventional~~ general-purpose digital computing environment that can be used for implementing various aspects of the invention; --.

The paragraphs on page 7, lines 9-17, have been replaced with the following:

-- Figure 3 shows an exemplary user interface (UI) that can be used for emulating the functional behavior of a two-button mouse-type computer input device according to aspects of the present invention;

Figure 4 is a functional block diagram showing the functional relationship of an in-air gesture recognizer according to aspects of the present invention with a pen digitizer and an application program; and

Figure 5 shows a flow diagram for a process for detecting an in-air gesture and emulating the functional behavior of a two-button mouse-type computer input device according to aspects of the present invention.

The paragraph on page 11, lines 6-16, has been replaced by:

Figure 2 illustrates a ~~tablet PC~~ stylus-based computing system 201 that can be used in accordance with various aspects of the present invention. Any or all of the features, subsystems, and functions in the system of Figure 1 can be included in the computer of Figure 2. Stylus-based computing system ~~Tablet PC~~ 201 includes a large display surface 202, e.g., a digitizing flat panel display, preferably, a liquid crystal display (LCD) screen, on which a plurality of windows 203 is

displayed. Using stylus 204, a user can select, highlight, and write on the digitizing display area. Examples of suitable digitizing display panels include electromagnetic pen digitizers, such as the Mutoh or Wacom pen digitizers. Other types of pen digitizers, e.g., optical digitizers, may also be used. Stylus-based computing system ~~Tablet PC~~ 201 interprets marks made using stylus 204 in order to manipulate data, enter text, and execute conventional computer application tasks such as spreadsheets, word processing programs, and the like.

The paragraph spanning pages 12, line 19, through page 13, line 6, has been replaced by:

The MIP of the present invention can be invoked, i.e., made to appear on the display of the stylus-based computing system~~tablet PC~~, in a number of different ways. One way is for a user to press a button that represents the MIP on a toolbar visible on the display. This, however, requires the user's hand to move away from the document or application to which the user's attention is focused to locate and depress the button that invokes the UI element. Another approach that has similar shortcomings is to use a hardware button on the housing of the stylus-based computing system~~tablet PC~~. The preferred alternative for invoking the MIP or other UI elements, or for affecting any other system control or input, is the use of the gesture of the present invention.

The paragraph spanning page 17, line 17, through page 18, line 7, has been replaced with the following:

-- Figure 5 shows a flow diagram 500 for a process for detecting an in-air gesture and emulating the functional behavior of a two-button mouse-type computer input device according to aspects of the present invention. The process begins at step 501. At step 502, it is determined whether the pen is in proximity to and in the air above the digitizing writing surface. If not, the process remains at step 502 until the pen is determined to be in proximity to and in the air above the digitizing writing surface, at which time flow continues to step 503 where the coordinate information stream generated by the in-air gesture of the pen is recorded in buffer 406 (Figure 4). Flow continues to step 504, where it is determined whether the in-air pen movement has stopped. If not, flow continues to step 503, where the recording of the coordinate information stream generated by the in-air gesture of the pen continues in buffer 406. --.

The paragraph spanning page 18, line 20, through page 19, line 11, has been replaced with the following:

-- While the present invention does not rely on complex in-air gestures for emulating the functional behavior of a two-button mouse-type computer input device, other in-air gestures other than spike movements can alternatively be utilized by aspects of the present invention. For example, other suitable in-air gestures that can be used with the present invention include circularly, triangularly, or rectangularly shaped motions, in addition to a saw tooth motion or a reciprocating motion. Moreover, a UI menu or control window other than a mouse-type input panel could be emulated by using an in-air gesture that is detected by aspects of the present

invention. Exemplary UI menus or control windows that could be controlled by in-air motions detected by aspects of the present invention include a file management menu, an edit function menu, and a formatting menu. Further still, an in-air gesture according to aspects of the present invention can be used for generating specific keystrokes, such as a space, backspace and carriage return, or user definable keystrokes and/or sequences of keystrokes.

In the claims:

The claims have been amended as follows:

17. (Amended) A ~~tablet Pe~~stylus-based computing system, comprising:

a digitizing writing surface generating a predetermined output; and

a display displaying a user interface having a plurality of soft buttons in response to the predetermined output, the plurality of soft buttons providing selectable functionality of a two-button mouse-type computer input device.

18. (Amended) The stylus-based computing system~~tablet PC~~ medium according to claim 17, wherein the plurality of soft buttons includes a right-button function, a shift function, a control function and an alternate function.

19. (Amended) The stylus-based computing system~~tablet PC~~ according to claim ~~9~~17, wherein the digitizing writing surface receiving a user selection of at least one of the

plurality of soft buttons.

20. (Amended) The stylus-based computing ~~tablet PC according~~system according to claim 19, wherein the user interface is hidden from view on the display when the user selection of a selected soft button is received.

21. (Amended) The stylus-based computing system~~tablet PC~~ according to claim 17, wherein the plurality of soft buttons includes a bull's-eye function.

22. (Amended) The stylus-based computing system~~tablet PC~~ according to claim 21, wherein the digitizing display receives a user selection for the bull's-eye function; and

wherein the stylus-based computing system~~tablet PC~~ sends a right-button event to an application displayed below the user interface on the display in response to the user selection for the bull's-eye function.

23. (Amended) The stylus-based computing system~~tablet PC~~ according to claim 17, further comprising an inactivity timer that is started when the user interface is displayed on the display, and

wherein the user interface is hidden from view on the display when a predetermined amount of time elapses without receiving a user selection of at least one of the plurality of soft buttons.

24. (Amended) The stylus-based computing system~~tablet PC~~ according to claim 17, wherein the predetermined output generated by the digitizing writing surface is a

predetermined in-air gesture made with a digitizing pen.